

REMARKS/ARGUMENTS

Applicant thanks the Examiner for the telephone discussion on March 26, 2008. The application and claim language were discussed, and the Examiner made suggestions for clarifying claim language. These suggestions are reflected in the amended claims.

Claims 69-74 and 78-96 are pending and presented for examination. Claims 1-68 and 75-77 were previously canceled. Specifically, claims 69-74 and 78-96 were rejected in the Office Action mailed December 28, 2007. Among these rejected claims, claims 79, 88, and 95 have been amended. No new matter is introduced. Reconsideration is respectfully requested.

Claim Objections

Claim 94 has been amended to replace "base board" with "base card" in response to the claim objections due to informality.

Claim Rejections under 35 U.S.C. § 103

Claims 69-73 and 78-96 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kastenholz et al. (U.S. Application Publication No. 2006/0007946). Additionally, claim 74 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kastenholz et al. (U.S. Application Publication No. 2006/0007946) in view of Gorshe et al. (U.S. Patent No. 6,667,973). Applicant respectfully traverses all of these rejections.

A. Claim 69

With respect to claim 69, Kastenholz, alone or in combination with Examiner's other cited prior art, does not disclose or suggest at least

a first transfer card coupled to the first circuit card through at least a first base card and a first backplane, the first base card being coupled directly to both the first transfer card and the first backplane, the first base card being neither a part of the first transfer card nor a part of the first

backplane, the first transfer card not being a part of the first circuit card, the first circuit card not being a part of the first transfer card...

a second transfer card coupled to the second circuit card through at least a second base card and a second backplane, the second base card being coupled directly to both the second transfer card and the second backplane, the second base card being neither a part of the second transfer card nor a part of the second backplane, the second transfer card not being a part of the second circuit card, the second circuit card not being a part of the second transfer card...

a first interface card coupled to the first switched network card through at least a third base card and a third backplane, the third base card being coupled directly to both the first interface card and the third backplane, the third base card being neither a part of the first interface card nor a part of the third backplane, the first interface card not being a part of the first switched network card, the first switched network card not being a part of the first interface card...

a second interface card coupled to the first switched network card through at least the third backplane...

Hence, claim 69 is patentable over Kastenholz for at least the following reasons.

Failure to Disclose or Suggest "a first transfer card coupled to the first circuit card through at least a first base card and a first backplane, the first base card being coupled directly to both the first transfer card and the first backplane"

As presented, claim 69 recites "a first transfer card coupled to the first circuit card through at least a first base card and a first backplane, the first base card being coupled directly to both the first transfer card and the first backplane". This limitation is illustrated, for example, in Figures 5, 6, and 7 and the associated text in paragraphs [0043-0046] in the instant application. An example of the coupling between a transfer card 30 and a circuit card 10 is shown in Figures 5 and 6. In a specific example, box 80 in Figure 6 shows one or more transfer cards 30 coupled to one or more circuit cards 10. Additionally, as shown in Figure 7, multiple transfer cards 30 can be mounted to base card 60. Base card 60 is inserted on the back plane by back plane interface 61, which provides connection between circuit card 10 and transfer card 30. Paragraph [0046].

Therefore, in a specific embodiment, the particular limitation cited above can be shown in Figures 5, 6, and 7 as follow:

a first transfer card (30, in Figure 7, also figures 5 and 6) coupled to the first circuit card (10, in Figures 5 and 6) through at least a first base card (60 in Figure 7) and a first backplane (through interface 61 in Figure 7), the first base card (60 in Figure 7) being coupled directly to both the first transfer card (30, in Figure 7) and the first backplane (through interface 61 in Figure 7).

Kastenholz et al. and Gorshe et al., alone or in combination, do not disclose or suggest at least the limitation cited above. For a more detailed discussion, the Examiner is respectfully referred to Applicant's amendment filed September, 24, 2007. Accordingly, for at least the above reasons, claim 69 should be allowed.

Failure to Disclose or Suggest "the first base card being neither a part of the first transfer card nor a part of the first backplane, the first transfer card not being a part of the first circuit card, the first circuit card not being a part of the first transfer card"

This limitation is illustrated, for example, in Figures 5, 6, and 7 and the associated text in paragraphs [0043-0046] in the instant application. In a specific embodiment, the particular limitation cited above can be shown as follow:

the first base card (60, in Figure 7) being neither a part of the first transfer card (30, Figure 7) nor a part of the first backplane (connected to 60 through interface 61 in Figure 7), the first transfer card (30, Figures 5 and 6) not being a part of the first circuit card (10, Figures 5 and 6), the first circuit card (10, Figures 5 and 6) not being a part of the first transfer card (30, Figures 5 and 6).

Kastenholz et al. and Gorshe et al., alone or in combination, do not disclose or suggest at least the limitation cited above. Accordingly, for at least the above reasons, claim 69 should be allowed.

Failure to Disclose or Suggest "a second transfer card coupled to the second circuit card through at least a second base card and a second backplane, the second base card being coupled directly to both the second transfer card and the second backplane"

Similar to the discussion above regarding the first transfer card, Kastenholz et al. and Gorshe et al., alone or in combination, do not disclose or suggest at least the limitation regarding the second transfer card cited above. Accordingly, for at least the above reasons, claim 69 should be allowed.

Failure to Disclose or Suggest "the second base card being neither a part of the second transfer card nor a part of the second backplane, the second transfer card not being a part of the second circuit card, the second circuit card not being a part of the second transfer card"

Similar to the discussion above, Kastenholz et al. and Gorshe et al., alone or in combination, do not disclose or suggest at least these limitations regarding the second transfer card cited above. Accordingly, for at least the above reasons, claim 69 should be allowed.

Failure to Disclose or Suggest "a first interface card coupled to the first switched network card through at least a third base card and a third backplane, the third base card being coupled directly to both the first interface card and the third backplane"

This limitation is similar to the limitations discussed above regarding the transfer cards. Further support for this limitation can be found in, for example, paragraphs [0012-0013, 0021-0022, 0033, and 0046].

Kastenholz et al. and Gorshe et al., alone or in combination, do not disclose or suggest at least the limitation cited above. Accordingly, for at least the above reasons, claim 69 should be allowed.

Failure to Disclose or Suggest "the third base card being neither a part of the first interface card nor a part of the third backplane, the first interface card not being a part of the first switched network"

card, the first switched network card not being a part of the first interface card"

This limitation is similar to the limitations discussed above. Kastenholtz et al. and Gorshe et al., alone or in combination, do not disclose or suggest at least the limitation cited above. Accordingly, for at least the above reasons, claim 69 should be allowed.

Failure to Disclose or Suggest "a second interface card coupled to the first switched network card through at least the third backplane"

This limitation is similar to the limitations discussed above. Kastenholtz et al. and Gorshe et al., alone or in combination, do not disclose or suggest at least the limitation cited above. Accordingly, for at least the above reasons, claim 69 should be allowed.

Accordingly, for at least the above reasons, claim 69 should be allowed.

B. Claims 70 and 71

Claims 70 and 71 each depends from claim 69. Hence claims 70 and 71 are allowable for substantially the same reason as claim 69, and more particularly for the specific features they recite.

C. Claim 72

Based on at least reasons that are similar to some reasons for claim 69, Kastenholtz, alone or in combination with Examiner's other cited prior art, does not disclose or suggest at least

a first transfer card coupled to the first circuit card through at least a first backplane, the first transfer card not being a part of the first circuit card, the first circuit card not being a part of the first transfer card...

a second transfer card coupled to the second circuit card through at least a second backplane, the second transfer card not being a part of the second circuit card, the second circuit card not being a part of the second

transfer card...

a first interface card coupled to the first switched network card through at least a third backplane, the third backplane and the first backplane being associated with different physical locations, the first interface card not being a part of the first switched network card, the first switched network card not being a part of the first interface card...

a second interface card coupled to the first switched network card through at least the third backplane...

Hence claim 72 should be allowed.

D. Claim 74

Claim 74 depends from claim 72. This claim is allowable for substantially the same reason as claim 72, and more particularly for the specific features it recites.

For example, claim 72 recites that "a first switched network card to at least perform an exchange function between the first circuit card and the second circuit card", and claim 74 recites "a second switched network card coupled to both the first interface card and the second interface card". (emphasis added).

For at least these additional reasons, claim 74 should be allowed.

E. Claims 73 and 78

Claims 73 and 78 depend from claim 72, and are allowable for substantially the same reason as claim 72, and more particularly for the specific features they recite.

F. Claims 79-87

With respect to claim 79 as amended, Kastenholtz, alone or in combination with Examiner's other cited prior art, does not disclose or suggest at least

a circuit card including a processing control logic, an outside interface, and a first internal interface;

a switched network card including a second internal interface;

a transfer card including a first optical interface connected with an internal optical fiber, and a first electrical interface connected with the first internal interface, the internal optical fiber being internal to the system;

an interface card including a second optical interface connected with the internal optical fiber, and a second electrical interface connected with the switched network card, the internal optical fiber being coupled to the interface card and the transfer card;

wherein the first internal interface, the second internal interface, the first electrical interface, and the second electrical interface use the same interface standard; and wherein:

the circuit card supports a connection with the switched network card through the first internal interface and the second internal interface; or
the circuit card connects with the transfer card through the first internal interface, the switched network card connects with the interface card through the second internal interface, the interface card connects with the transfer card through the internal optical fiber. (amendment underlined)

For at least these additional reasons, claim 79 should be allowed. Additionally, claims 80-87 depend from claim 79, and are allowable for substantially the same reason as claim 79, and more particularly for the specific features they recite.

G. Claims 88-94

With respect to claim 88 as amended, Kastenholtz, alone or in combination with Examiner's other cited prior art, does not disclose or suggest at least

receiving an external signal by a circuit card;

converting the external signal into an internal signal of the circuit card;

receiving the converted internal signal by a transfer card;

converting the converted internal signal into an optical signal;

transmitting the optical signal to an interface card through an optical fiber, the optical fiber being coupled to the transfer card and the interface card;

converting the optical signal into an electric signal by the interface card;
transmitting the electric signal to a switched network card;

wherein the number of transfer cards, the number of interface cards, the number of optical fibers, and the number of switched network cards can be increased with the number of circuit cards. (amendment underlined)

For at least these additional reasons, claim 74 should be allowed. Additionally, claims 89-94 depend from claim 88, and are allowable for substantially the same reason as claim 88, and more particularly for the specific features they recite. For a more detailed discussion, the Examiner is respectfully referred to Applicant's amendment filed September, 24, 2007.

H. Claims 95-96

With respect to claim 95, Kastenholz, alone or in combination with Examiner's other cited prior art, does not disclose or suggest at least

a circuit card including a processing control logic, an outside interface, and a first internal interface;

a switched network card including a second internal interface;

a transfer card including a first optical interface connected to an internal optical fiber, and a first electrical interface connected to the first internal interface, the internal optical fiber being internal to the system;

an interface card including a second optical interface connected to the internal optical fiber, and a second electrical interface connected to the switched network card, the interface card being connected with the transfer card via the internal optical fiber;

one or more back planes each providing multiple interface slots for the circuit card, providing multiple interface slots for the switched network card;

wherein:

the transfer card is connected with the circuit card through the one or more back planes by inserting the transfer card into the interface slots for the switched network card;

the interface card is connected with the switched network card through the one or more back planes by inserting the interface card into the interface slots for the circuit card. (amendment underlined)

For at least these additional reasons, claim 95 should be allowed. Claim 96 depends from claim 95, and are allowable for substantially the same reason as claim 96, and more particularly for the

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specific features it recites. For a more detailed discussion, the Examiner is respectfully referred to Applicant's amendment filed September, 24, 2007.

Therefore, Applicant respectfully submits that claims 69-74 and 78-96 should be allowed.

CONCLUSION

In view of the foregoing, Applicant believes all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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